

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/435,562	11/08/1999	ERIK J. VAN DER BURG	MVMDINC.001C	5387
20995	7590 01/30/2004		EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			DAWSON, GLENN K	
2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614		ART UNIT	PAPER NUMBER	
			3761	
			DATE MAILED: 01/30/2004	, 23

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	ij
			_
Office Action Summary	09/435,562 Examiner	VAN DER BURG ET AL. Art Unit	
• · · · · · · · · · · · · · · · · · · ·	Glenn K Dawson	3761	
The MAILING DATE of this communication app			_
Period for Reply		·	
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	mely filed ys will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).	
1) Responsive to communication(s) filed on <u>09 C</u>	<u> 0ctober 2003</u> .		
2a) ☐ This action is FINAL . 2b) ☑ This	action is non-final.		
3) Since this application is in condition for allowa closed in accordance with the practice under B	nce except for formal matters, pr Ex <i>parte Quayle</i> , 1935 C.D. 11, 4	osecution as to the merits is 53 O.G. 213.	
Disposition of Claims			
4) Claim(s) 38-45,51-98,101 and 106-109 is/are	pending in the application.		
4a) Of the above claim(s) is/are withdra	wn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>38-45,51-98,101,106-109</u> is/are reject	oted.		
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	or election requirement	•	
	or election requirement.		
Application Papers		·	
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc		Evaminor	
Applicant may not request that any objection to the	· · · · · · · · · · · · · · · · · · ·		
Replacement drawing sheet(s) including the correct			
11) The oath or declaration is objected to by the Ex			
Priority under 35 U.S.C. §§ 119 and 120			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list 13) Acknowledgment is made of a claim for domest since a specific reference was included in the fir 37 CFR 1.78. a) The translation of the foreign language profile. Acknowledgment is made of a claim for domest reference was included in the first sentence of the second control of the foreign language profile.	ts have been received. Its have been received in Application of the certified copies not received in Application of the certified copies not received priority under 35 U.S.C. § 1190 of the sentence of the specification of the certified copies not received priority under 35 U.S.C. § 120 ovisional application has been received priority under 35 U.S.C. §§ 120 ovisional application has been received priority under 35 U.S.C. §§ 120 ovisional application has been received priority under 35 U.S.C. §§ 120 ovisional application has been received and the control of the certification over the certification of the certification over the certification over the certification of the certification over the certification over the certification over the certification of the certification over the certification	tion No red in this National Stage ed. (e) (to a provisional application) or in an Application Data Sheet. ceived. D and/or 121 since a specific	
Attachment(s)	n □ 1 ·	(DTO 442) Decar No/a)	
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)	
S. Patent and Trademark Office			_

Art Unit: 3761

Allowable Subject Matter

The indicated allowability of claims in the last office action is withdrawn in view of the newly discovered reference(s) to Banas and Riedy. Rejections based on the newly cited reference(s) follow.

Claim Objections

Claims 38-45 are objected to because of the following informalities: in claim 38, the phrase "the 2nd layer membrane" should be "the 2nd membrane". Appropriate correction is required.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 38-40,51,53,55,56,57,58,62,63,66-69,72,75,83-86,89,92,94,101,106 and 109 are rejected under 35 U.S.C. 102(e) as being anticipated by Banas-6124523.

Art Unit: 3761

Banas discloses a device having an expandable stent between two layers of e-PTFE. The layers are bonded together and to the stent by an adhesive layer. The ends of the stent are flared constituting the claimed portions going from a straight configuration to an inclined orientation upon expansion. The porosity of the layers is10-90 microns.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 3761

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 61,64,65,70,71,73,74,76,87,88,90,91,93 and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banas, et al.-'523 in view of Huebsch, et al.-'422.

Banas discloses the invention as claimed with the exception of the materials of the layers. Huebsch discloses the use of Nitinol as an expandable frame. It would have been obvious to have manufactured the stent portion of Banas out of nitinol as this material has the required resilience, self-expanding and flexibility that Banas discloses the stent needs. As for the other materials, the specification has not provided any criticality to these materials, has not stated that these choices are designed to solve any particular problem and the examiner contends that the materials of the prior art device would work equally as well, making the claimed materials obvious design choices.

Claims 95-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banas, et al.-'523 in view of Huebsch, et al.-'422 as applied to the claims above, and further in view of Riedy, et al.-5108474.

Banas as modified by Huebsch makes obvious the invention as claimed with the exception of the type of adhesive used. Riedy discloses that polyethylene mesh adhesives were known. It would have been obvious to have used a polyethylene mesh adhesive to attach the layers of Banas's device, as this adhesive has been shown to be effective at forming strong laminates.

Art Unit: 3761

Claims 38-45,51-94,101 and 106-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huebsch-'422 in view of Banas, et al.-'523.

Huebsch discloses a device having struts which are bendable to an inclined angle to facilitate their use as a closing device. An outer covering may be applied to the device to improve tissue in-growth. However, the specific material and porosity of the covering is not disclosed.

Banas discloses a device having an expandable stent between two layers of e-PTFE. The layers are bonded together and to the stent by an adhesive layer. The ends of the stent are flared constituting the claimed portions going from a straight configuration to an inclined orientation upon expansion. The porosity of the layers 10-90 microns. It is well known that e-PTFE has a porosity to allow for tissue ingrowth in stents or grafts. See Lentz-'545. It would have been obvious to have provided Huebsch's device with a covering such as that disclosed by Banas, as this is known to provide a good surface allowing for tissue ingrowth.

Claims 95-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huebsch-'422 in view of Banas, et al.-'523 as applied to the claims above, and further in view of Riedy-' et al.-5108474.

Huebsch as modified by Banas makes obvious the invention as claimed with the exception of the type of adhesive used. Riedy discloses that polyethylene mesh adhesives were known. It would have been obvious to have used a polyethylene mesh adhesive to attach the layers of Huebsch and Banas's device, as this adhesive has been shown to be effective at forming strong laminates.

Response to Arguments

Applicant's arguments with respect to all of the claims have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn K Dawson whose telephone number is 703-308-4304. The examiner can normally be reached on M-Th 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 703-308-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

Glenn K Dawson Primary Examiner Art Unit 3761

Gkd 25 January 2004